The Sandy, UT (Historic District) Lead Exposure Study, 1994
Summary

From October, 1993, through November, 1994, the University of Cincinnati undertook a lead exposure study in Sandy Utah in collaboration with the Salt Lake City/County Health Department and with financial support for ASARCO. The initial work plan was developed by the University of Cincinnati with review and modification as suggested by the Health Department and EPA Region VIII site managers and toxicologists.

The objectives of the study were to : 1) Characterize the blood lead concentrations of young children (6-72 months of age) living in Sandy, Utah, and identify children with elevated blood lead (> 10 μg/dl). 2) Identify and quantify sources of lead in the residential environments of young children. 3) Evaluate the impact of soil removal on residential lead levels and young resident's exposures by obtaining pre-and post-abatement environmental and biological measures when possible. 4) Work with local public health and city/county officials, as well as local residents, to promote better understanding of health risks associated with environmental lead exposures for Sandy's youngest residents. Communicate individual exposure data to affected residents and property owners. 5) Verify previous paint lead data by performing paint XRF measurements and paint chip analyses, and 6) Evaluate the IEUBK model projections for Sandy with data collected in this study.

The community census identified 1238 families in the EPA designated study area. Ninety percent of the families (N=1111 families) participated in the interview process. The census identified 277 families in the study area with one or more children less than 6 years old. Fifty percent of these families were randomly selected from each street to participate in the study. One hundred and forty families, with age appropriate children, participated in the residential environmental assessments. One hundred and seventeen children volunteered for blood lead screening, while 203 children had hand dust wipes collected.

The study found that the geometric mean (average) blood lead in young children in 1994 was 3.1 ug/dl, with no children having a blood lead level equal to or greater than 10ug/dl. The national average at this time was 2.7 +/- 0.3 ug/dl with 4.4% above 10 ug/dl. The low blood lead levels of children in the area was re-confirmed in a 1995 Health Department survey of 1 to 3 years, from low income families. The latter study of a high risk sub-population of children also found no children with blood lead levels above 10 ug/dl. Thus children's average blood lead levels are at the national average and all children that were tested are below the level of concern established by the EPA and Centers for Disease Control.

Numerous sources of lead, including house paint, soils, street dust, and house dust were identified throughout the study areas. Average soil lead concentrations in excess of 2000 ppm were found on 10 percent of the properties evaluated. Interior floor dust lead concentrations were, on average, about 55 percent of the level found in soils, with only 6

DIRECTORY OF CONTACTS

Where to Turn With Your Questions About the Historic Smelters in Sandy

U.S. Environmental Protection Agency
Office of Ecosystems Protection & Remediation
999 18th Street - Suite 500
Denver, Colorado 80202-2466

-official repository for all major documents and complete project records
-weekdays, 8am to 5pm
The EPA oversees the investigation of contaminated sites and their cleanup, and is the lead regulatory agency for the Sandy Smelters Site. Questions about the process, progress, schedule, public participation, sampling results and who is responsible for what, can be directed to the EPA.

- Brian Pinkowski, EPA Project Manager (303) 312-6567

Utah Department of Environmental Quality
Division of Environmental Response & Remediation
168 North 1950 West
P.O. Box 14480
Salt Lake City, Utah 84114-4840
-repository for all major documents
-weekdays, 8am to 5pm
The Department of Environmental Response & Remediation assists EPA in providing regulatory oversight at the Sandy Smelters Site. Questions about sampling results, who is responsible and the process, can be directed to DERR.

- Diane Simmons, Public Relations (801) 536-4481

ASARCO Incorporated
3422 South 700 West
Salt Lake City, Utah 84119
-repository for documents relative to cleanup on the south end of the site, Community Protection Measures (CPM) program, and blood lead study report.
-Weekdays, 8am to 5pm
Asarco can answer questions about the CPM program, the University of Cincinnati blood lead study, and soil remediation activities conducted in 1994 on the south end of the site. They can also answer questions on what it is doing to meet its legal and community obligations in Sandy.

- Jim Fricke, Project Manager (801) 256-2090

LEAD & YOUR HEALTH

Health Forum
Sandy Smelters Site
Monday, March 17, 1997, 7 p.m.
Sandy Elementary School, 8725 South, 280 East
Attendance

Name Irma Martin Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name Gerry Henningsen Phone 312-6673

Affiliation, (if any) EPA

Address

City Denver State Co Zip 80202

Name MARILYN AUSICK Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name E. LaRue Bell Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

LEAD & YOUR HEALTH

Health Forum
Sandy Smelters Site
Monday, March 17, 1997, 7 p.m.
Sandy Elementary School, 8725 South, 280 East

Attendance

Name DANNA KIRK Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name Kristen Roper Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name Phone

Affiliation, (if any)

Address

City State Zip

Name Phone

Affiliation, (if any)

Address

City State Zip

LEAD & YOUR HEALTH

Health Forum
Sandy Smelters Site
Monday, March 17, 1997, 7 p.m.
Sandy Elementary School, 8725 South, 280 East
Attendance

Name Janet Elliott Phone (b) (6)
Affiliation, (if any)
Address (b) (6)
City

Name Robert J. Jones Phone (b) (6)
Affiliation, (if any)
Address (b) (6)
City

Name Phone
Affiliation, (if any)
Address
City State Zip

Name Phone
Affiliation, (if any)
Address
City State Zip

LEAD & YOUR HEALTH

Health Forum
Sandy Smelters Site
Monday, March 17, 1997, 7 p.m.
Sandy Elementary School, 8725 South, 280 East
Attendance

Name DAN C. HILL Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name Nick Gilbert Phone (b) (6)

Affiliation, (if any)

Address (b) (6)

City

Name Phone

Affiliation, (if any)

Address

City State Zip

Name Phone

Affiliation, (if any)

Address

City State Zip

LEAD & YOUR HEALTH

Comments

I have comments for the following:

- [x] Environmental Protection Agency
- [ ] ASARCO Incorporated
- [ ] Sandy City
- [ ] Salt Lake City-County Health Department
- [ ] State of Utah Department of Environmental Quality
- [x] All

Would like the EPA to finish their job on the Carpenter home at 495 E 8680 South. Sandy, Ut. when the soil was removed from the home 2 doors from me the job was not finished. I have lived here since 1974. and I know it is dangerous, not for me but for children who may come in contact with it —

Name (Optional): Lorna Carpenter

Address: (b) (6) [redacted]

LEAD & YOUR HEALTH

Comments

I have comments for the following:

- [x] Environmental Protection Agency
- [ ] ASARCO Incorporated
- [x] Sandy City
- [x] Salt Lake City-County Health Department
- [x] State of Utah Department of Environmental Quality
- [ ] All

One of the only things we as residents can do to limit our exposer to the environmental lead in our community is to stop the dust and dirt from entering our homes. Each year the baseball diamonds around Sandy Decentenial Park are raked without watering to keep the dust (a major source of house dust & lead) low in the air around our homes. Should we cover the exposed dirt on these diamonds? If we are being told to not track dirt into our homes - shouldn't the city as responsible neighbors eliminate our risk from their dust? Please have someone call and discuss this with me!

Name (Optional): Nick Gilbert

Address: (b) (6) [redacted]